

In the claims:

Please amend claims 1, 14, 20, and 21. The status of all claims is as follows:

1. (Currently Amended) A superconductive highly inductive component havingcomprising: at least two terminals, said component comprisinghaving at least one line segment incorporating at least one terminal of the component, said line segment constituting a conducting or superconducting layer within a stack of thin layers of alternately an electrically insulating material and a superconductive material, said stack including a plurality of layers of said insulating material and a plurality of layers of said superconductive material, said component further including tuning means producing a resistive connection between at least two of said superconductive layers.

2. (Previously Presented) The component according to claim 1, characterized in that said stack is positioned on a superconductive track.

3. (Previously Presented) The component according to claim 1, wherein a connection between two of said superconductive layers connected by the tuning means has more or less uniform resistance in said stack.

4. (Previously Presented) The component according to claim 1, wherein a connection between two of said superconductive layers connected by the tuning means has a variable resistance within said stack.

5. (Previously Presented) The component according to claim 1, wherein the tuning means comprise at least one substance applied to all or part of the section of said stack so as to produce a resistive connection between at least two superconductive layers.

6. (Previously Presented) The component according to claim 5, characterized in that the tuning means have resistance characteristics which vary as a function of a physical or chemical variable, termed a control variable, specific to the environment of the component.

7. (Previously Presented) The component according to claim 5, wherein the tuning means have a resistance controlled by an exposure or a variation of exposure to a light radiation.

8. (Previously Presented) The component according to claim 5, wherein the tuning means have a resistance controlled by a variation of temperature.

9. (Previously Presented) The component according to claim 5, wherein the tuning means have a resistance controlled by an exposure or a variation of exposure to a magnetic field.

10. (Previously Presented) The component according to claim 5, wherein the tuning means have a resistance controlled by an exposure or a variation of exposure to an electric field.

11. (Previously Presented) The component according to claim 5, wherein the tuning means comprise a compound constituted by a polymer including metal particles.

12. (Previously Presented) The component according to claim 1, wherein the tuning means comprise means for controlling the resistance of at least one connection between two superconductive layers connected by said tuning means.

13. (Previously Presented) The component according to claim 12, characterized in that the control means include an electric or electronic circuit for controlling the electrical resistivity or resistance between at least two superconductive layers connected by the tuning device.

14. (Currently Amended) An electronic device

includingcomprising; a superconductive highly inductive component having at least two terminals, said component comprisinghaving at least one line segment incorporating at least one plot of the component, said line segment constituting a conducting or superconducting layer within a stack of thin layers of alternately an electrically insulating material and a superconductive material, said stack including a plurality of layers of insulating material and a plurality of layers of superconducting material, and said component further includesincluding tuning means producing a resistive connection between at least two of said superconductive layers.

15. (Previously Presented) The device according to claim 14, further configured for providing an optoelectronic transducer function.

16. (Previously Presented) The device according to claim 14, further including a capacitive component and providing a delay line function.

17. (Previously Presented) The device according to claim 14, wherein said device produces at least one antenna including an inductive superconductive component.

18. (Previously Presented) The device according to claim 16, being implemented in a phase shift radar device comprising a plurality of antennae each comprising an electronic circuit including at least one delay line, said delay line being arranged such that each of said antennae transmits or receives a signal the phase of which is shifted relative to that of the neighboring antennae.

19. (Previously Presented) The device according to claim 17, being implemented in a medical imaging device comprising at least one antenna including a superconductive inductive component the tuning means of which enable said antenna to be tuned.

20. (Currently Amended) A method for the production of a superconductive highly inductive component with a determined inductance value, said component having at least two terminals and comprising at least one line segment incorporating at least one of said terminals, said method comprising: a phase of depositing a stack of alternately superconductive and insulating thin layers on a substrate, said stack including a plurality of insulating layers and a plurality of superconducting layers, said line segment constituting a conducting or superconducting layer within said stack, followed by a phase of depositing on all or part of the section of the stack at least one tuning layer with a material which produces between a plurality of said

superconductive layers an electrical connection with a determined resistance, selected according to said inductance value.

21. (Currently Amended) A method for the production of a superconductive highly inductive component having controllable inductance characteristics, said component having at least two terminals and comprising at least one line segment incorporating at least one of said terminals, said method comprising: a phase of depositing a stack of alternately superconductive and insulating thin layers on a substrate, said stack including a plurality of insulating layers and a plurality of superconducting layers, said line segment constituting a conducting or superconducting layer within said stack, followed by a phase of depositing on all or part of the section of the stack at least one tuning layer, producing between a plurality of said superconductive layers an electrical connection with a resistance varying as a function of a physical or chemical variable of the environment of said tuning layer.

22. (Previously Presented) A method according to claim 20, wherein after the phase of depositing a stack, the component has a so-called intermediate inductance value, and the phase of depositing the tuning layer enables a reduction of the inductance of the component relative to its intermediate inductance.